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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,433	11/24/2003	Norio Tomiyoshi	FUJR 20.752	5112

26304 7590 03/22/2007  
KATTEN MUCHIN ROSENMAN LLP  
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EXAMINER
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BURD, KEVIN MICHAEL

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/720,433

Applicant(s)

TOMIYOSHI ET AL.

Examiner

Kevin M. Burd

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Objections***

2. Applicant is advised that should claims 1-4 and 9 be found allowable, claims 5-8 and 10 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 9 and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 9 and 10 qualify under the judicial exemption since the claim does not claim a useful, concrete and tangible result.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2611

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the elements for conduction the function described in lines 6-13 of the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-12 are rejected under 35 U.S.C. 102(a) as being anticipated by Nishio et al (EP 1 233 536).

Regarding claims 1 and 5, Nishio discloses a communication device for performing wireless communication shown in figure 1. Nishio discloses a channel estimation section 1 that holds data and conducts channel estimation (paragraph 0013). Nishio further discloses a switching determining section 6. The switching determining section 6 receives and holds a signal for measurement. This portion is the measurement-period holding unit. The switching determining section 6 detects the number of spreading codes multiplexed in the received signal (paragraph 0013). The number is compared to a predetermined threshold value and a demodulation section is switched according to this comparison (paragraph 0013). This portion is the change

Art Unit: 2611

recognition unit. Change is recognized since the demodulation can be switched. If the rake demodulation section 2 is selected prior to the received baseband signal being input to the switching determining section 6 and the switching determining section determines the spreading codes are greater than the threshold, the demodulation will be switched to the joint detection demodulation section 3. Therefore, a change in the number of spreading codes from a value less than the threshold to a number greater than the threshold is recognized. The measurement period will correspond to the received baseband signal and therefore the change in number of spreading codes. The specific demodulation sections will measure the spreading codes multiplexed in the received signal to properly demodulate the received signal. These sections are the delay-profile measurement unit. Additional information discussing the receiver of figure 1 is found in paragraphs 0016-0018.

Regarding claims 2 and 6, Nishio discloses the number of spreading codes is measured and the change recognition unit recognizes an increase or decrease in the number of spreading codes as stated above.

Regarding claims 3, 4, 7 and 8, the claimed invention requires a measurement-period holding unit operates in accordance with values indicating one or a combination of a wireless condition or a service quality level. Nishio discloses the unit operates according to a wireless condition (number of spreading codes). Claims 3, 4, 7 and 8 claim limitations of the service quality level. These limitations are optional. MPEP 2111.04 states claim scope is not limited by claim language that suggests or makes optional but does not limit a claim to a particular structure.

Regarding claims 9 and 10, Nishio discloses a method of using a communication device for performing wireless communication shown in figure 1. The method is shown in figure 2. Nishio discloses a channel estimation section 1 that holds data and conducts channel estimation (paragraph 0013). Nishio further discloses a switching determining section 6. The switching determining section 6 receives and holds a signal for measurement. The switching determining section 6 detects the number of spreading codes multiplexed in the received signal (paragraph 0013). The number is compared to a predetermined threshold value and a demodulation section is switched according to this comparison (paragraph 0013). Change is recognized since the demodulation can be switched. If the rake demodulation section 2 is selected prior to the received baseband signal being input to the switching determining section 6 and the switching determining section determines the spreading codes are greater than the threshold, the demodulation will be switched to the joint detection demodulation section 3. Therefore, a change in the number of spreading codes from a value less than the threshold to a number greater than the threshold is recognized. The measurement period will correspond to the received baseband signal and therefore the change in number of spreading codes. The specific demodulation sections will measure the spreading codes multiplexed in the received signal to properly demodulate the received signal. Additional information discussing the receiver of figure 1 is found in paragraphs 0016-0018.

Regarding claims 11 and 12, Nishio discloses a communication device for performing wireless communication shown in figure 1. Nishio discloses a channel estimation section 1 that holds data and conducts channel estimation (paragraph 0013).

Art Unit: 2611

Nishio further discloses a switching determining section 6. The switching determining section 6 receives and holds a signal for measurement. The switching determining section 6 detects the number of spreading codes multiplexed in the received signal (paragraph 0013). The number is compared to a predetermined threshold value and a demodulation section is switched according to this comparison (paragraph 0013). Change is recognized since the demodulation can be switched. If the rake demodulation section 2 is selected prior to the received baseband signal being input to the switching determining section 6 and the switching determining section determines the spreading codes are greater than the threshold, the demodulation will be switched to the joint detection demodulation section 3. Therefore, a change in the number of spreading codes from a value less than the threshold to a number greater than the threshold is recognized. The measurement period will correspond to the received baseband signal and therefore the change in number of spreading codes. The specific demodulation sections will measure the spreading codes multiplexed in the received signal to properly demodulate the received signal. Additional information discussing the receiver of figure 1 is found in paragraphs 0016-0018.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Burd whose telephone number is (571) 272-3008. The examiner can normally be reached on Monday - Friday 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin M. Burd  
3/19/2007

  
**KEVIN BURD**  
**PRIMARY EXAMINER**